

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F2VS Technologies, LLC

Plaintiff,

v.

Ubiquiti Inc.,

Defendant.

C.A. No. 1:20-cv-00315-RGA

JURY TRIAL DEMANDED

**DEFENDANT UBIQUITI INC.'S OPENING BRIEF IN SUPPORT OF ITS
MOTION TO DISMISS FOR FAILURE TO STATE A CLAIM**

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I. NATURE AND STAGE OF PROCEEDINGS

Plaintiff F2VS Technologies, LLC filed this lawsuit on March 3, 2020, generally accusing defendant Ubiquiti Inc.'s Mesh Wi-Fi products of infringing U.S. Patent Nos. 7,379,981, 8,700,749, and 8,855,019. *See* D.I. 1 (“Complaint”). Ubiquiti hereby moves to dismiss F2VS’s Complaint for failure to state a claim upon which relief may be granted because the claims of the Asserted Patents fail the Supreme Court’s two-step *Alice* test regarding patent eligibility. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208 (2014). The claims fail Step One of the *Alice* test because they are directed to the abstract idea of a self-configuring wireless network. And the claims fail Step Two of the *Alice* test because their claims simply reiterate the abstract idea using generic components functioning in conventional ways, which is insufficient to confer patent eligibility. *Id.* at 217-18.

II. SUMMARY OF ARGUMENT

Ultimately, the claims of the Asserted Patents fall short of patent eligibility because they claim *no specific solutions* to the technical problems identified in the prior art systems, but instead merely claim *the desired result* of a self-configuring wireless network that automatically solves the identified technical problems. The Supreme Court held in *Alice* that results-oriented patent claims directed to abstract ideas are invalid as a matter of law under 35 U.S.C. § 101, and courts have applied that holding in dozens of cases since *Alice*. *Id.* at 226-27; *see also, e.g., Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015) (holding claims to be patent ineligible because they were directed to a result rather than a means for achieving the result); *Epic IP LLC v. Backblaze, Inc.*, 351 F. Supp. 3d 733, 740 (D. Del. 2018) (noting that claims that “recite the concept, but not the way to implement it,” are ineligible for patenting).

Resolving these issues does not require additional discovery or claim construction. Thus, to avoid waste of judicial and party resources litigating invalid patents, Ubiquiti requests the Court grant its motion to dismiss under Rule 12(b)(6) of the Federal Rules of Civil Procedure.

III. LEGAL STANDARDS

A. Rule 12(b)(6)

“To survive a motion to dismiss, a complaint must contain sufficient factual allegations, taken as true, to ‘state a claim to relief that is plausible on its face.’” *Kennedy v. Am. Airlines Inc.*, 760 F. App’x 136, 139 (3d Cir. 2019) (internal citations omitted). Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). The § 101 inquiry is properly raised at the pleadings stage if it is apparent that the asserted claims are directed to ineligible subject matter. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 718-19 (Fed. Cir. 2014) (Mayer, J., concurring); *Bancorp Servs. L.L.C. v. Sun Life Assur. Co.*, 687 F.3d 1266, 1273 (Fed. Cir. 2012) (“[W]e perceive no flaw in the notion that claim construction is not an inviolable prerequisite to a validity determination under § 101.”).

B. 35 U.S.C. § 101

Section 101 of the Patent Act sets forth four categories of patentable subject matter: “any new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The law also recognizes three exceptions to patent eligibility: “laws of nature, physical phenomena, and *abstract ideas*.” *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980) (emphasis added).

Abstract ideas are ineligible for patent protection because a monopoly over these ideas would preempt their use in all fields. *See Bilski*, 561 U.S. at 611-12. In other words, “abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.” *Id.* at 653 (internal quotations omitted). Hence, the § 101 analysis for abstract ideas requires courts to determine “whether the claims [at issue] focus on a specific means or method that

improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). “The abstract idea exception prevents patenting a result where it matters not by what process or machinery the result is accomplished.” *Id.* at 1312 (internal quotations omitted). Accordingly, “[c]laims that are so result-focused, so functional, as to effectively cover any solution to an identified problem are frequently held ineligible under section 101.” *Affinity Labs of Texas, LLC v. DirecTV, LLC*, 838 F.3d 1253, 1265 (Fed. Cir. 2016).

IV. THE ASSERTED PATENTS

A. The Asserted Patents’ Specification

The inventors of the Asserted Patents do not claim to have invented wireless networks generally, or any novel wireless networking hardware or software specifically.¹ ’981 Patent at 1:51-52. Rather, they identified problems in the art and then purported to have invented a wireless network that *self-configures* to overcome those problems. The problems, the Asserted Patents explain, arise because “conventional wireless networks generally operate using a loop configuration in which each node in the network is interconnected and communicates only with two neighboring nodes.” *Id.* at 1:55-58. This was allegedly undesirable because “when one node is disabled, the integrity of the entire network is affected[, and] if the master node ... is disabled, the network becomes isolated.” *Id.* at 1:64-2:2. These problems were purportedly solved by the Asserted Patents, which recite a wireless network with nodes that, if disconnected, are capable of “execut[ing] a self-configuration routine” to reconnect themselves to the network. *Id.* at 2:25-37.

¹ All three Asserted Patents share the same specification, figures and inventors; claim priority to provisional application No. 60/179,046 filed on January 31, 2000; are entitled “Wireless Communication Enabled Meter and Network”; and are directed to the same abstract idea of a self-configuring wireless network. As such, all citations to the Asserted Patents’ shared specification will be made with reference to the ’981 Patent.

Yet, the details of this self-configuration routine and how it solves the problems in the prior art are not specified, much less claimed, as the Asserted Patents only describe the concept in terms of the **result** of generic hardware and software components interacting with one another in conventional ways.

For example, the Asserted Patents point to Figure 2 as a graphical representation of the claimed self-configuring network, which consists of network nodes referred to as “virtual nodes” or “vnodes” (23), a master node referred to as an “anode” or “vgate” (22), and a “virtual network operations center” or “vnoc” (25).

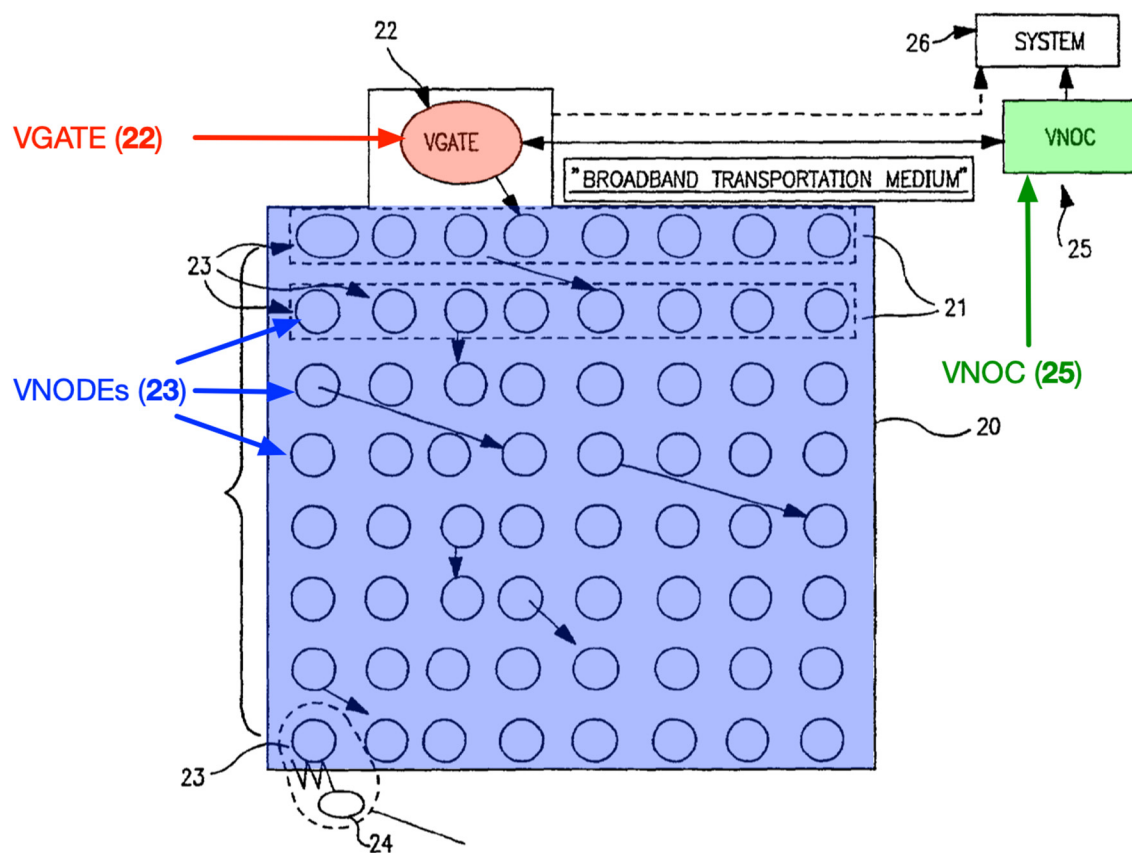


FIG. 2

Id. at Fig. 2 (colored annotations and highlighting added); 4:56-5:12; 8:56-9:29. The Asserted Patents acknowledge that the claimed self-configuring network consists solely of generic networking devices employing conventional communication protocols:

- “Vnodes 23 may comprise devices that are designed to collect data ... Vnodes 23 comprise individually addressable entities enabled for wireless communication. Vnodes 23 can be originators, recipients or routers of data According to one embodiment, a vnode 23 comprises a device enabled for wireless communication using the Bluetooth™ protocol.” *Id.* at 5:47-49; 5:57-59; 6:13-15.
- “VGATE 22 comprises a standard computer gateway enabled for Bluetooth™ communication.” *Id.* at 7:22-23.
- “VNOC 25 comprises a virtual network operation center. According to one embodiment, VNOC 25 comprises a universal communication adapter that is enabled to transmit and receive using a variety of communication protocols and media VNOC 25 is capable of communicating using RF, cellular, microwave, satellite and other communication protocol.” *Id.* at 8:63-9:2.

Referring to Figures 5-8, the Asserted Patents then describe the self-configuration routine—which supposedly permits the wireless vnodes to automatically connect and reconnect and is the claimed advance—as a series of generic steps:

- Step 1: The vnodes first broadcast a message to connect. *Id.* at Fig. 5; 10:57-65 (“when Vinodes 23 bootup, they wait a pseudo-random amount of time ... before broadcasting a request for a VGATE. The vnodes then wait for a valid response from other vnodes to setup their routes ... This process is repeated till a valid response is received from another vnode 23.”).
- Step 2: The vnodes then connect to other vnodes and stop broadcasting. *Id.* at Fig. 6; 11:5-14 (upon “successfully receiv[ing] a message [vnodes] update their routing tables and stop broadcasting the request message.”).
- Step 3: Unless, however, the connection is unacceptable for some reason, in which case the vnodes continue attempting to connect. *Id.* at Fig. 7; 11:15-31 (“if the metric, usage or transport-agent provided parameter (e.g. radio signal strength) is unacceptable the vnodes can simply discard the response and wait for responses from other vnodes.”).
- Step 4: “This process continues until all vnodes are configured.” *Id.* at Fig. 8; 11:32-34.

Finally, as for how the claimed self-configuration routine overcomes the prior art problem of “one [disabled] node ... [affecting] the integrity of the entire network,” the Asserted Patents simply refer back to the self-configuration process described above. *Id.* at 1:64-2:2. In fact, the Asserted

Patents assign the solution of the claimed advance as the “responsibility” of the generic network nodes, with no details on how the node is to fulfill that responsibility: “In case there is an error (a vnode fails, or communications fails) it is then the responsibility of vnode X to find another route by sending out a request.” *Id.* at 11:56-58.

B. The Asserted Claims

The Asserted Patents’ claims cover substantially the same concepts disclosed in the specification. As an initial matter, Claim 1 of the ’981 Patent is representative of all claims for § 101 purposes because none of the remaining claims contain distinctions that are material to the patent eligibility analysis and all claims are “substantially similar and linked to the same abstract idea.” *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014); *Mortg. Grader, Inc. v. First Choice Loan Servs., Inc.*, 811 F.3d 1314, 1318, 1325 (Fed. Cir. 2016) (finding claims across two patents to be ineligible based on a representative claim of one patent); *Alice*, 134 S. Ct. at 2359-60 (finding 208 claims across four patents to be ineligible based on analysis of one representative claim); *Phoenix Licensing, L.L.C. v. Consumer Cellular, Inc.*, No. 2:16-cv-152-JRG-RSP, 2017 WL 1065938, at *8-9 (E.D. Tex. Mar. 8, 2017) (invalidating 974 claims after analyzing only a few “representative claims” where the other claims were “substantially similar” and “linked to the same abstract idea.”). Instead, the remaining claims recite substantially the same elements, generic components and processes, and/or add different aspirational functionalities. *See, e.g.*, ’981 Patent Dependent Claims 2-23; ’749 Patent Dependent Claims 2-10, 12; ’019 Patent Dependent Claims 2-10, 12 (reciting additional conventional functionality of the generic components comprising the self-configuring wireless network).²

² The Complaint asserts “at least Claim 1” of each of the Asserted Patents. Complaint at ¶¶ 22, 34, 46. The ’981 Patent has 23 claims, of which only one is independent. The ’749 and ’019 Patents

But “claims are not saved from abstraction merely because they recite components more specific than a generic computer.” *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1286 (Fed. Cir. 2018). Nor does the addition of token pre- or post-solution limitations or purely conventional functions performed by generic computer components render the remaining claims patent eligible. *See Mayo*, 566 U.S. at 79 (“Purely ‘conventional or obvious’ ‘[pre]-solution activity’ is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law.”) (internal citations omitted); *Bilski*, 561 U.S. at 610-11 (“[T]he prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or adding ‘insignificant postsolution activity.’”) (internal quotations omitted). As such, Claim 1 of the ’981 Patent is representative of all claims.

Representative Claim 1 of the ’981 Patent recites a system of generic components (shown in the left-most column with the same coloring used in annotated Figure 2 above) operating in conventional ways (shown in italicized bold):

Description	'981 Patent, Claim 1 (<i>emphasis added</i>)
Preamble	1. A self-configuring wireless network, comprising:
VNODE	(I) a network cluster, comprising: (a) a first network including a plurality of self-configuring, individually addressable virtual nodes in which individual virtual nodes are independently operative to (i) <i>initiate and establish</i> a wireless communication connection with any other self-configuring virtual node associated with the first network during a self-configuration process, (ii) <i>store</i> information regarding the identities and/or location of other self-configuring virtual nodes with which the node has established a communication connection,

each have 12 claims, two of which are independent. However, the additional independent claims in the ’749 and ’019 Patents recites a method variant of Asserted Claim 1.

	<p>(iii) <i>generate</i> data and <i>transmit</i> the data to other virtual nodes with which the node has established a communication connection, and</p> <p>(iv) <i>receive</i> data from virtual nodes and <i>forward</i> the data to other virtual nodes with which the node has established a communication connection;</p> <p>(b) a second network including a plurality of self-configuring, individually addressable virtual nodes in which individual virtual nodes are independently enabled with the capabilities to</p> <p>(i) <i>initiate and establish</i> a wireless communication connection with any other self-configuring virtual node associated with the first network during a self-configuration process,</p> <p>(ii) <i>store</i> information regarding the identities and/or location of other self-configuring virtual nodes with which the node has established a communication connection,</p> <p>(iii) <i>generate</i> data and <i>transmit</i> the data to other virtual nodes with which the node has established a communication connection, and</p> <p>(iv) <i>receive</i> data from virtual nodes and <i>forward</i> the data to other virtual nodes with which the node has established a communication connection;</p> <p>(c) wherein the first network communicates with the second network via a wireless communication connection between at least virtual node associated with the first network and at least one virtual node associated with the second network;</p>
VGATE	(II) a virtual gate being communicatively coupled to the first and/or second network and <i>configured to provide a communication access point</i> between the network cluster and at least one external network; and
VNOC	(III) a virtual network operations entity <i>configured to facilitate communications</i> between the network cluster, and at the least one external network.

Claim 1 thus reduces to a series of generic components—wireless communication devices (vnodes), a computer gateway (vgate), and a universal communication adapter (vnoc)—configured and arranged in their conventional ways, communicating with conventional communication protocols, to achieve the result of a self-configuring wireless network. The network is self-configuring only because the claims say they are—how that self-configuration is achieved is entirely absent from the claims.

V. ARGUMENT

A. *Alice* Step One: Claim 1 of the '981 Patent is Directed to an Abstract Idea

Claim 1 of the '981 Patent fails at *Alice* Step One because it is directed to the abstract idea of a self-configuring wireless network. Step One of the *Alice* inquiry requires an examination of the claims to determine whether their “focus” or “character as a whole” is directed to excluded subject matter. *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018); *see also Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1334 (Fed. Cir. 2012) (“In considering patent eligibility under § 101, one must focus on the claims.”). The goal of this examination is to identify the basic concept at the “heart” of the claims. *See Ultramercial*, 772 F.3d at 714-15 (abstract idea at the “heart” of the eleven step claim was using advertising as an exchange or currency). For computer-implemented claims, “the first step of the *Alice* inquiry . . . asks whether the focus of the claims is on [a] specific asserted improvement in computer capabilities . . . or, instead, on . . . an ‘abstract idea’ for which computers are invoked merely as a tool.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335-36 (Fed. Cir. 2016).

As is apparent on its face, the focus of Claim 1 is on the desired **result** of a self-configuring wireless network. But merely claiming the goal of a self-configuring wireless network absent specific means for achieving it is a concept, not an invention, and thus patent ineligible. *See, e.g., Epic IP*, 351 F. Supp. 3d at 740 (“The problem, however, is that the idea of a chat session separate from the original website is not an invention; it is a disembodied concept. The asserted claims of the '599 patent recite the concept, but not the way to implement it.”). This is precisely the case here. Claim 1 fails to recite **how** the claimed self-configuration capability is achieved in any particularized way or **how** it arises out of otherwise generic computer components. *See Affinity Labs*, 838 F.3d at 1258 (“There is nothing in claim 1 that is directed to **how** to implement out-of-region broadcasting on a cellular telephone. Rather, the claim is drawn to the idea itself.”)

(emphasis in original); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241 (Fed. Cir. 2016) (affirming that the claims were patent-ineligible where “[t]hey do not claim a particular way of programming or designing the software to create menus that have these features, but instead merely claim the resulting systems”).

Claim 1 also employs the same type of purely functional language that courts have routinely held to reflect an abstract idea. See *Affinity Labs*, 838 F.3d at 1269-70 (“The purely functional nature of the claim confirms that it is directed to an abstract idea....”); *In re TLI Commc’ns*, 823 F.3d at 612 (ineligible claims described system “in purely functional terms”); *Vehicle Intelligence and Safety LLC v. Mercedes-Benz USA, LLC*, 635 F. App’x 914, 918 (Fed. Cir. 2015) (patent lacked “any details about how the ‘expert system’ works”). Each element of Claim 1 functionally recites *what* function must be performed to practice the claim, rather than *how* the function must be performed. For example, Claim 1 consists of:

- Wireless **vnodes** that form network clusters by ***establishing*** a wireless connection; ***storing*** identification information; and then ***generating, transmitting, receiving*** and ***forwarding*** data to one another. ’981 Patent, Claim 1.
- A **vgate** ***configured to provide a communication access point*** between the network cluster and an external network. *Id.*
- A **vnoc** ***configured to facilitate communications*** between the network cluster, and an external network. *Id.*

Claim 1’s results-focused elements—which include no specific mechanisms or concrete limiting details for achieving the results—further confirm that the claims are directed to an abstract idea. See *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1356 (Fed. Cir. 2016) (“[T]he essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101.”); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1341 (Fed. Cir. 2017) (“[T]he claims recite both a generic computer element—a processor—and a series of generic computer “components” that merely restate their individual functions—i.e.,

organizing, mapping, identifying, defining, detecting, and modifying. That is to say, they merely describe the functions of the abstract idea itself, without particularity.”).

Moreover, unlike *Enfish*, it is clear that the focus of Claim 1 is not directed to any specific means or method for improving computer capabilities, but rather the abstract idea of a self-configuring wireless network itself. *See, e.g.*, ’981 Patent at Figs. 2, 5-8; 4:56-5:39; 10:52-11:60. There, the Federal Circuit found the claims patent eligible because the focus “is on the specific asserted improvement in computer capabilities”—namely, a self-referential database that improved the way computers stored and retrieved data in memory—rather than “on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Enfish*, 822 F.3d at 1335-36 (Fed. Cir. 2016); *cf. Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1151-52 (Fed. Cir. 2019) (claimed invention was non-abstract because it “improve[d] the functioning of the overall technological process of detecting systematic errors in data transmissions.”); *Ancora Techs v. HTC*, 908 F.3d 1343, 1348 (Fed. Cir. 2018) (claims determined to be “a non-abstract computer-functionality improvement [] done by a specific technique that departs from earlier approaches to solve a specific computer problem”); *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1348-49 (Fed. Cir. 2017) (claims determined to be non-abstract because they were directed to a method of using “inertial sensors in a non-conventional manner to reduce errors” when measuring the location of moving objects.). Here, however, the focus of Claim 1 is on the concept of a self-configuring wireless network: “an improvement in wholly abstract ideas,” rather than an improvement “in the way computers and networks carry out their basic functions.” *SAP Am.*, 898 F.3d at 1168.

Claim 1’s abstract focus is further confirmed by the Federal Circuit’s most recent § 101 opinion involving computer-oriented claims. In *Customedia Techs., LLC v. Dish Network Corp.*,

the Federal Circuit upheld the Patent Trial and Appeal Board’s determination that the claims of U.S. Patent Nos. 8,719,090 and 9,053,494 were directed to abstract ideas and not a specific improvement in computer technologies. No. 2018-2239, 2020 WL 1069742 (Fed. Cir. Mar. 6, 2020). The Federal Circuit rejected Customedia’s contention that Claim 1 of the ’090 Patent—which recited a “data delivery system for providing automatic delivery of . . . specifically identified advertising data”—constituted an improvement in computer technology simply because it reserved a section of storage for advertising data. *Id.* at *5-7. Even accepting Customedia’s contention would not change the result, the Federal Circuit explained, because “the claimed invention ***merely improves the abstract concept*** of delivering targeted advertising using a computer only as a tool” and “[t]he specification is silent as to any specific structural or inventive improvements in computer functionality.” *Id.* at *7, 12-13 (emphasis added).

The same reasoning holds true here. At best, Claim 1 of the ’981 Patent merely recites an abstract improvement over conventional wireless networking technology by claiming various generic computer components infused with self-configuring capability. But as in *Customedia*, the specification is silent as to how the claimed self-configuring capability is specifically achieved, and indeed discloses that it can be achieved in an almost limitless number of ways with a variety of generic components. *See* Section III.A., *supra*.

Finally, that Claim 1 is limited to the wireless networking environment does not alter this analysis. “Most obviously, limiting the claims to [a] particular technological environment . . . is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.” *Elec. Power*, 830 F.3d at 1354. As the Supreme Court explained in *Alice*, “the prohibition on patenting abstract ideas cannot be circumvented by attempting to limit the use of the idea to a particular technological environment.” *Alice*, 573 U.S. at 222-23 (internal quotation

omitted); *see buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (narrowing the claims to cover only online transactions was “an attempt to limit the use of the abstract guarantee idea to a particular technological environment, which has long been held insufficient to save a claim in this context”) (internal quotations and citations omitted). Nor is Claim 1 “saved from abstraction merely because [it] recite[s] components more specific than a generic computer.” *BSG Tech*, 899 F.3d at 1286 (Fed. Cir. 2018). Thus, Claim 1 is directed to an abstract idea of self-configuration *even if* its limitations require practicing that idea in the technological environment of a wireless network. This concept is an abstract idea, not an invention. Accordingly, Claim 1 fails the first step of the *Alice* test.

B. *Alice* Step Two: Claim 1 of the '981 Patent Contains no Inventive Concept

Claim 1 of the '981 Patent fails *Alice* Step Two because it contains no “inventive concept.” *Alice*, 573 U.S. at 217-18 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 73 (2012)). The second step of the § 101 analysis requires courts to determine whether the claims at issue contain an “‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* “[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea ... on a generic computer.” *Id.* at 225. Claim 1 fails this inquiry because its claim elements, whether considered individually or as an ordered combination, merely apply the abstract idea of a self-configuring wireless network in a generic technological environment using conventional computer components and functions, reciting nothing beyond the abstract idea itself. *BSG Tech*, 899 F.3d at 1289-90 (“These transformative elements must supply an ‘inventive concept’ that ensures the patent amounts to ‘significantly more than a patent upon the [ineligible concept] itself.’”) (quoting *Alice*, 573 U.S. at 217-18 (alteration in original)).

This is precisely what Claim 1 does: it instructs the practitioner to implement the abstract idea of a self-configuring wireless network with generic components used in conventional ways. Thus, like many of the functionally-claimed patents found to be ineligible at Step Two, Claim 1 “do[es] not meaningfully limit the claims to provide the requisite inventive concept.” *Capital One*, 850 F.3d at 1342 (“Our law demands more” than claim language that “provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it”); *see also Alice*, 573 U.S. at 222 (transforming an abstract idea into a patent-eligible claim “requires more than simply stating the abstract idea while adding the words ‘apply it.’”); *In re TLI Commc’ns Patent Lit.*, 823 F.3d 607, 615 (Fed. Cir. 2016) (holding that “vague, functional descriptions of server components are insufficient to transform the abstract idea into a patent-eligible invention”); *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324 (Fed. Cir. 2016) (no inventive concept where “the claims ‘add’ only generic computer components such as an ‘interface,’ ‘network,’ and ‘database’”).

That Claim 1 relies on generic components used in conventional ways is indisputable. As detailed in Section III.A. above, the Asserted Patents’ shared specification concedes that wireless networking technologies already existed in the prior art. ’981 Patent at 1:51-52. The specification further acknowledges that the claimed invention relies solely on generic hardware and software used in the conventional manner to achieve the claimed result of self-configuration. *Id.* at 5:47-49; 5:57-59; 6:13-15; 7:22-23; 8:63-9:2; 10:57-65; 11:5-34; Figs. 2, 5-8. Indeed, “[n]othing in [Claim 1], understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network and display technology for gathering, sending, and presenting the desired information.” *Elec. Power*, 830 F.3d at 1355.

But it is well established that “[t]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Id.* at 223. For example, in *TLI Communications*, even though the claims at issue recited “concrete, tangible components,” such as “a telephone unit” and “a server,” the Federal Circuit found the claims patent ineligible because the specification described those components “as either performing basic computer functions such as sending and receiving data, or performing functions ‘known’ in the art.” 823 F.3d at 613-14. There is simply nothing inventive in these “well-understood, routine, activit[ies].” *Id.* at 613; *see also buySAFE, Inc.*, 765 F.3d at 1355 (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”). “Such generic and functional hardware is insufficient to render eligible claims directed to an abstract idea.” *Customedia Techs., LLC*, 2020 U.S. App. LEXIS 7005 at *14.

Nor does any of Claim 1’s elements go beyond “stating [the relevant] functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology.” *Elec. Power*, 830 F.3d at 1351. Because the “features set forth in the claims are described and claimed generically rather than with the specificity necessary to show how those components provide a concrete solution to the problem purportedly addressed by the patent,” Claim 1’s elements thus fail to convert the abstract idea of a self-configuring wireless network into a patent-eligible invention. *Affinity Labs*, 838 F.3d at 1271; *see also TLI Commc’ns*, 823 F.3d at 615 (claims failed step two because “the recited physical components behave exactly as expected according to their ordinary use”); *Vehicle Intelligence*, 635 F. App’x. at 919 (stating that claimed system is accomplished using “already existing [] equipment, without more, does not save the disputed claims from abstraction.”); *Elec. Power*, 830

F.3d at 1356 (“result-focused,” “functional” claims ineligible). Accordingly, Claim 1 fails the second step of the *Alice* test.

C. No Claim Construction or Factual Disputes Prevent a Ruling

The issue of the patent eligibility of the Asserted Patents is ripe for the Court’s consideration. There are no claim construction issues affecting the *Alice* analysis, as F2VS has not proposed any constructions of the Asserted Patents’ terms that would alter the ineligibility of the claims. More importantly, Ubiquiti’s motion does not turn on factual allegations about what is routine or conventional. Instead, the claims lack an inventive concept because they do not recite anything significantly more than the abstract idea implemented with functionally-recited elements and admittedly generic computer components. That does not raise factual disputes because “it is irrelevant whether [the abstract idea] may have been non-routine or unconventional as a factual matter.” *BSG Tech*, 899 F.3d at 1291. “The abstract idea itself cannot supply the inventive concept, no matter how groundbreaking the advance.” *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1093 (Fed. Cir. 2019) (quotation omitted).

The few cases finding dismissal at the Rule 12 stage improper based on allegations of an inventive concept are easily distinguishable, because in those cases—unlike here—support for the inventive concept was in the intrinsic record itself. For example, in *Cellspin*, the patent at issue specifically recited an unconventional manner of initiating a paired connection between the claimed data capture (transmitting) and mobile (receiving) devices by utilizing existing communicational protocols at a specific location and in conjunction with a “push” mode so as to effectuate data transfer. *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1311, 1317 (Fed. Cir. 2019). Nevertheless, the district court determined (and the Federal Circuit agreed) that the claims were directed to an abstract idea at *Alice* Step One. *Id.* The Federal Circuit reversed at *Alice* Step Two, however, because the patentee, unlike F2VS, alleged in its Complaint that its patent was

inventive based on hardware improvements allowing capture devices “to be smaller and cheaper to build” and “made specific, plausible factual allegations about why aspects of its claimed inventions were not conventional.” *Id.* at 1316-17. Those allegations included detailed explanations of how “reducing the complexity of hardware allows for smaller size” and how “using HTTP at a specific location” and “establishing a paired connection before transmitting data” were inventive. *Id.* at 1317 (“Cellspin did more than simply label these techniques as inventive. It pointed to evidence suggesting that these techniques had not been implemented in a similar way”; citing evidence of hardware improvements and that “[i]t was not until 2009 or later when the leading tech companies, such as Facebook and Google, started releasing HTTP APIs for developers to utilize a HTTP transfer protocol for mobile devices.”).

In contrast, F2VS’s Complaint is devoid of any allegation of inventiveness, much less evidence supporting such a claim. *See generally*, Complaint. And unlike the patent claims in *Cellspin*—which the Federal Circuit found could “recite a specific, plausibly inventive way of arranging devices and using protocols”—the Asserted Claims here require no specific arrangement of devices or unconventional use of protocols, instead merely reciting the generic components and the abstract idea of a self-configuring wireless network. *Cellspin*, 927 F.3d at 1319; *see also Aatrix Software v. Green Shades Software*, 882 F.3d 1121, 1127-30 (Fed. Cir. 2018) (acknowledging propriety of deciding eligibility at motion to dismiss stage where claim elements involve generic computing capabilities of “data collection, recognition, and storage,”; but reversing dismissal, finding factual issue regarding existence of inventive concept in light of “concrete allegations” and detailed explanation supporting that claimed “data file” limitation obviated need to custom program form files to work with outside applications) (citing *Content Extraction*, 776 F.3d at 1347).

The logic behind *Berkheimer v. HP, Inc.* also supports dismissal. 881 F.3d 1360 (Fed. Cir. 2018). There, the patent related to digitally processing and archiving files in a digital asset management system. The court vacated summary judgment of ineligibility as to certain dependent claims that recited a specific method of archiving using one-to-many editing that reduced redundancy. *Id.* at 1368. It noted that the “improvements in the specification, to the extent they are captured in the claims, create a factual dispute regarding whether the invention describes well-understood, routine, and conventional activities.” *Id.* at 1369. But the Federal Circuit affirmed a determination of ineligibility as to the claims that did not capture the alleged improvement, finding that they “amount[ed] to no more than performing the abstract idea of parsing and comparing data with conventional computer components.” *Id.* at 1370. Like the ineligible claims in *Berkheimer*, the Asserted Claims here do no more than recite the underlying abstract idea.

Finally, given the substantial failings of the intrinsic evidence (which cannot change), it would be futile to provide F2VS an opportunity to amend its complaint. *See Automated Tracking*, 723 F. App’x at 995 (“Our analysis of the representative claims here uncovers no inventive concept in the individual claim limitations or their ordered combination.... The complaint at issue has no allegations, which when accepted as true, would even create a factual issue, and [the patent] specification indicates that the components of the claimed invention are conventional.”); *TLI Commc’ns*, 823 F.3d at 614 (“[H]ere we need to only look to the specification which describes the [components] performing basic computer functions ... or performing functions known in the art.”) (internal quotation marks omitted). It would be implausible, for example, for F2VS to allege in a second amended complaint that the components of the claims are novel, when the specification repeatedly describes them as conventional. These same failings necessarily mean that waiting until summary judgment to assess the patentability of the Asserted Patents is unnecessary, as the Court

would not then be permitted to rely on extrinsic evidence to contradict the indisputable statements of the specification. *See Berkheimer*, 881 F.3d at 1368 (“As our cases demonstrate, not every §101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry.”).

VI. CONCLUSION

For the foregoing reasons, Ubiquiti respectfully requests that the Court dismiss F2VS’s patent infringement claims based on the Asserted Patents for failure to state a claim upon which relief can be granted. Because leave to amend would be futile, Ubiquiti requests dismissal with prejudice.

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Respectfully submitted,

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